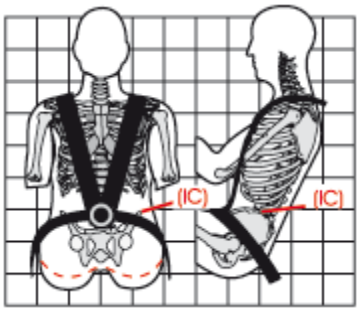
50 mm (2") Lap Belts



To explain why 50 mm (2“) webbing is more effective than 75 mm (3“) webbing, one needs to look at the shape of the human body. The Iliac Crest (IC) is the part of the pelvic bone that sticks out above the hips. 50 mm (2“) webbing fits entirely within the recession created by the Iliac Crest, where 75 mm (3“) webbing rides over the top of the Iliac Crest. The 75 mm (3“) webbing has less contact area by percentage than the 50 mm (2“) webbing which will cause more bruising during an impact where the belt is making contact with the pelvic bone. Since the 50 mm (2“) webbing rides inside the Iliac Crest it can be worn as much as 25 mm (1“) to 40 mm (1.5“) tighter and at the same time is more comfortable.
Since the 50 mm (2“) webbing fits well within the Iliac Crest of the pelvis, it is less likely to slide up above the crest and cause submarining a condition where the body slides down below the lap belt possibly causing internal organ damage.
Research shows that the faster the pelvis is captured, the lower the resultant loads on the chest, head, and neck. There is no difference in the strength of the 50 mm (2“) webbing. All webbing: 50 mm (2“) or 75 mm (3“) must meet the same homologation test loads.

An additional benefit of the 50 mm (2“) lap belts, the required force to properly and tightly adjust the belts in the cars is much easier than with 75 mm (3“) belts.